August 1, 1972

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL RESOURCES
BUREAU OF WATER QUALITY MANAGEMENT
PRE-APPLICATION PLANNING REVIEW
PROJECT EVALUATION FORM

1. Name and address of project sponsor
City of Phila - Water Dept.
1180 Municipal Services Bldg.
Responsible official Carmen F. Guarino - Water Commissioner
Municipality Philadelphia
County Philadelphia
Receiving stream Delaware River

2. Name and address of consulting engineer Greeley & Hansen, Engrs.
222 South Riverside Plaza
Chicago, Ill. 60606

3. Project Description:

A. Check all applicable boxes

☐	Collection	☐	New System	☐	Extensions to Existing System	☒	Replacement to Exisitng System
☐	Conveyance	☐	New System	☐	Extensions to Existing System	☐	Replacement or Relief of Existing System
☒	Treatment	☐	New System	☒	Expansion of Existing Plant	☒	Upgrading of Existing Plant

B. Provide a brief description of the project
Expand & Upgrade Wastewater Treatment Facilities at Philadelphia Southwest Water Pollution Control Plant, 80th & Penrose Ave., Phila. In Accordance with Joint Orders of the Pa. D.E.R. and DRBC Issued July, 1968

C. Complete all application sentences

(1) Collection: _____ ft. of gravity sewer, _____ to _____ inches in diameter;
_____ pumping stations _____, _____ and _____ mgd peak pumping capacity

(2) Conveyance: _____ ft. of gravity sewer, _____ to _____ inches in diameter;
_____ pumping stations _____, _____ and _____ mgd peak pumping capacity

(3) Treatment: (Description of process) Preliminary treatment (including Grit & Screening Removal, & Primary Settling) Followed by Oxygen Activated Sludge Treatment, Final Sedimentation, and Effluent Chlorination. Grit, Screenings & Scum will be incinerated. Sludge will be thickened, Digested, and Barged to Sea.

D. Attach a map, maximum size 11" x 17" locating and differentiating between existing and proposed:

(1) Collection Systems
(2) Conveyance Sewers
(3) Treatment plant site(s)

Note: Include other pertinent information

See Sheet 1 -Site Plan Index - Southwest Plant Report on Detailed Design Studies, October 1972

4. Proposed Project Design Basis

Items A-C complete applicable information concerning just the proposed project. For all projects complete D-F.

A. Collection

(1) Design year _____

(2) Type areas to be served (residential, commerical, etc.) _____

	Initial	Design
(3) Equivalent population to be served	_____	_____
(4) Area to be served (in acres)	_____	_____

B. Conveyance

(1) Design year _____

(2) Type areas to be served (residential, commerical, etc.) _____

	Initial	Design
(3) Equivalent population to be served	_____	_____
(4) Area to be served (in acres)	_____	_____

C. Treatment

(1) Design year 1990 Design Flow 210 Population served 1,355,000

(2) Type area to be served (residential, commerical, etc.) Residential, Commercial, and Industrial

(3) Wastewater flows (at receiving STP)

	Initial year (1976)	5 years later (1981)	Design year (1990)
Average daily flow			
Existing service area	142 MGD	144 MGD	151 MGD
Proposed service area	18 MGD	41 MGD	59 MGD
Future service area	—	—	—
Total	160 MGD	185 MGD	210 MGD
Estimated percent industrial waste	3.7 %	3.2 %	3 %

(4) Wastewater characteristics - (If these values are not consistent with the Sewerage Manual, provide an explanation.)

Design Year - 1990

	Raw	Treated
Solids-Suspended mg/l	279	28
BOD - 5 day - 20°C mg/l	193	13
Nitrogen - ammonia mg/l	9	<35
Phosphate - total soluble PO4mg/l	7	<10 as P

D. Service area domestic population (to be completed for all projects)

(1) Sewage treatment plant service area

Year	Existing Service Area(s)	Proposed Service Area(s)	Future Service Area(s)
1940			
1950			
1960	880,000		
1970	910,000		
Present	913,000		
1980		1,250,000	
1990		1,355,000	
2020		1,725,000	3,710,000 [1]
Municipalities to be served [2]	3	8	11

Note: If any values in this table exceed the design of the treatment plant, provide an explanation.

Design Year is 1990, Therefore 2020 Population Exceeds Design

(2) Give the source(s) of the information provided in 4 A to D.

Phila. Southwest Plant Report On Design Studies - October 1972

[1] Assumes Completely Regional Plant

[2] County Population Included in Service Area Population in D-1

(3) If more than one municipality is listed in (D-1); list domestic population in each for the following years:

Existing Service Area(s) Municipality Name	Present	1980	1990	2020
Upper Darby, Springfield, Lower Marion	250,000			

Proposed Service Area(s) Municipality Name	Present	1980	1990	2020
Upper Darby, Springfield, Lower Marion	-	275,000	310,000	365,000
Eastern Delaware Co.	-	430,000	485,000	585,000
Whitemarsh, Upper Dublin, Upper & Lower Gwynedd	-	48,000	75,000	95,000